CHAPTER 1

CREATING SPLASH SCREENS

Creating Image Maps

In this chapter, you will:

- Design splash screens
- Use guides
- Create image maps with ImageReady
- Create image maps manually

Splash screens are often used on the Web to introduce sites. Unlike magazines, Web sites have no front cover that quickly establishes the identity of the site. Most sites have a unique logo and color scheme, but many use the same layout and end up looking almost exactly alike. Designers of some sites choose to use a large graphic on the home page to introduce the site to visitors and to help distinguish the home page. These splash screens might be only a large static graphic, or also can link to other parts of the site.

You can use any type of graphic for splash screens, but a common one is an image map, which is a single graphic that can link to multiple destinations. Image maps do have some limitations, so you might prefer to lay out your splash screen using tables in HTML and multiple small image files instead of one large image map.

This chapter covers creating image maps and using graphics to lay out Web pages.

DESIGNING SPLASH SCREENS

Not every site is appropriate for using splash screens. Web page design often involves a compromise between speed and graphics; most sites need to focus on being fast rather than being attractive, if they want to retain users who are reluctant to wait for pages to download. Design is, of course, more than just making things attractive. It also is about making the interface more useful by helping to identify content and by making navigation clear. A well-designed splash screen, therefore, should be more than something pleasing to the eyes. It can establish the identity of the site as well as all of the content and features available on the site. It also can be functional, and provide clear navigation to the rest of the site. Many sites can benefit from using splash screens, as long as they do not take too long to download.

If you decide to use a splash screen, it will probably be the largest image on the site, with a few hundred pixels on each side. Most Web graphics have tight constraints of dimensions, file size, and purpose, so creating images such as buttons, bullets, and animations is more craft than art. Splash screens provide the biggest opportunity for artistic expression and require the most creative design skills of any type of Web graphic.

You can create splash screens using image maps (described later), or using multiple pieces of a larger image positioned in the cells of HTML tables. You also can use Flash or other animation formats.

Splash screens are normally used on the home page of a site and are the users' first introduction to the style of the rest of the site. The splash screen sets the mood for all the pages to follow. If the splash screen takes a few minutes to load completely, the user may suspect the rest of the site will also load slowly. If the navigation is unclear and requires hunting for the proper link, the user may suspect that the rest of the site also has an unintuitive architecture. If the splash screen is attractive and useful, however, the user probably will have high expectations for the other pages.

The design of a splash screen has to be as creative and interesting as possible, without compromising the needs of quick downloading.

Selecting a Format

If you look around the Web, you will see that only certain types of sites use splash screens. Most commercial sites make money from displaying ads or by collecting commissions from online purchases. The producers of these sites normally want the content or services to be available to users as quickly as possible, and splash screens can represent barriers that users must cross before they can begin engaging with the site. The style of most commercial pages is to provide the user with as much content and as many links as possible at all times, encouraging them to click to additional pages. Commercial sites usually have no blank space and fill every inch with information, navigation buttons, or advertisements. Commercial sites rarely use any extraneous design or graphics. Their business relies on pages loading quickly, and they do not use elements that slow down the loading of a page.

A better candidate for splash screens is a promotional site. Promotional sites range from personal sites (that promote a person or hobby), to portfolio sites that promote an artist and his or her work, to corporate sites that promote a product or image. The purpose of these sites is to define the brand, image, and mood of a person or product and to provide information or services. Splash screens are appropriate for these sites because the graphical display of information and navigation allows the designer to evoke a feeling, instead of merely listing text links.

Another type of site that can benefit from splash screens is one that requires users to open an account before accessing the site. Such sites include online banking or stock trading sites. The producers of these sites usually want to provide information only to users who do have accounts on the site. The front page of these sites requires only an identity, a login box, a signup box, and information about the site. This often leaves plenty of room for a splash screen. Without one, the page would be nearly empty. So, in addition to helping brand the site, splash screens can help fill a page.

If you choose to create a splash screen for a site, you have several choices for implementation. You can create an image map, lay out several small images in a table, or use an advanced technology such as Flash, which is a vector animation format requiring a plug-in.

Using an Image Map

If you have tried positioning buttons in tables, you know it can be difficult to use any layout other than a simple row or column. Image maps, on the other hand, allow pixel-perfect control over the positioning of your graphics. Instead of multiple images where each one links to a different page, an image map is a single image that can have links to many pages. The locations and sizes of the linked regions are defined in HTML code. The links in image maps are called **hot spots**. Recall that any image can be used as a hyperlink. Because Web graphics are always rectangular, the clickable area is always rectangular as well, even when the image contains transparency. With image maps, the hot spots can be rectangular, circular, or polygonal—having many sides. These are shown in Figure 11-1.

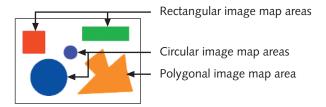


Figure 11-1 Different shapes of hot spots

Another advantage to image maps is that you can use soft, feathered gradations of color over textured backgrounds in an image map, as shown in Figure 11-2. This cannot be done with normal buttons, which always have hard edges.

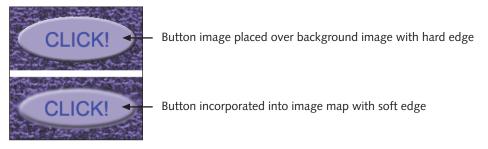


Figure 11-2 Feathered edges over a background in an image map

Because image maps tend to be larger than other types of Web graphics, and have larger file sizes, it is worth creating an image map only when you have a complex design that cannot be easily implemented with multiple small images. Usually, the image maps take longer to download than anything else on a site. This is especially problematic because splash screen pages are almost always the first page that users see. It is crucial to not discourage users when they get to that first page. Everyone who has used the Web has had the experience of trying to view a page, becoming frustrated by how slowly the page loads, then clicking the back button and trying a different site. If users must wait more than several seconds for a page to load before they see anything, they will try another site. As with every Web graphic, you have to find the right balance between an attractive image and one that loads quickly.

Few site designers use image maps. They prefer to use several images positioned near each other in a grid. This type of image is called a sliced image. Other alternatives to creating an image map are to use a Flash animation or a 3-D graphic as a splash screen. These alternatives are discussed in the following sections. One reason for using image maps as opposed to these other options is that image maps are single images, and all links are available at the same time. If you use several buttons, or use individual images positioned close to each other in tables, users might have to wait and watch as each component image loads.

Using a Sliced Image

Image maps tend to be large, perhaps a few hundred pixels in each direction, and their files are large, too. Image maps must use the same optimization method for the whole image, even if large areas are solid color. When optimizing an image, whether through color reduction or compression, you must choose the appropriate optimization method, based on the highest color area of the image. Even if most of the image is blank, as long as a section of the image contains smooth gradients or photographic detail, the entire image must be optimized for these high-color areas. The image cannot be optimized fully; this results in a file that is larger than necessary. To solve this problem, break up the image map into several pieces, optimize each piece separately, and display them in a grid. This is similar to the tabbed interfaces discussed in the Creating Buttons chapter.

Slicing images allows you to compress each image slice separately. It also allows you to animate or swap specific regions in the splash screen, as you do with rollover effects, which are covered in the Creating Image Rollover Effects chapter. The disadvantage to using these presentations is that they can be very complicated to put together, even with the help of software such as ImageReady.

Another disadvantage is that you cannot use circles or complex polygons as clickable areas because the tables that contain them are rectilinear. All clickable images in a sliced image must be rectangular. This is not a problem for most projects, but if you have many small linked areas near each other in a sliced image, and the clickable areas are adjacent, the user can accidentally click the wrong link. Figure 11–3 shows the difference between image map hot spots and clickable sliced images.

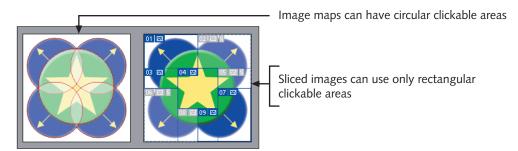


Figure 11-3 Clickable areas in image maps and sliced images

Still, because of the additional optimization control and the ability to animate and swap specific sections of the larger image, most sites use sliced images for their splash screens rather than image maps. Creating sliced images is covered fully in the Creating Sliced Images chapter.

Using Flash

You might want to use Flash to create animations for your splash screens instead of using image maps. Flash is actually perfect for splash screens because it can contain sophisticated animation and, as a vector file, the Flash movie loads quickly. Flash movies usually take more time to create than image maps or sliced images, so you would not use Flash to create small images such as simple buttons or logos. Because splash screens are larger and can showcase your work, the time it takes to create a Flash movie is worth the effort.

Splash screens are the first image users see at a site, and provide an opportunity for the designer to impress the user. An application such as Flash helps you create animations that are more sophisticated than the simple GIF animations discussed in the Creating Animation for the Web chapter. The main advantage of using Flash is that your sophisticated animations also will have a relatively small file size. On the other hand, animating an image map or table full of sliced images using ImageReady will produce files that are prohibitively large.

To view a Flash animation, users must have installed the appropriate version of the Flash plug-in in their browser. You cannot guarantee that all users will have the appropriate plug-in. According to Macromedia, the developer of Flash, over 90% of users have a Flash plug-in installed on their browser. However, many of these plug-ins are older versions, compatible with Flash versions 2 or 3. These older versions cannot display movies created with the latest version of Flash, which at this writing is Flash 5. If you do use Flash, you need to create a backup image that will display if the user's browser does not have the proper plug-in and the Flash movie does not play. So, even if you do not intend for most users to use your image map, you should create one as a backup.

Using 3-D Technology

In addition to a Flash animation, consider other graphics formats for splash screens. Formats such as Virtual Reality Markup Language (VRML), Java 3D, MPEG-4 and MPEG-7 (two multimedia formats from the Moving Picture Experts Group, the same organization that developed the MP3 audio format), and Extensible 3D with XML (X3D) are programming languages or complex markup languages. The tools to create images in these formats are almost as complex as the formats themselves. Also, other than the Java applets, all these formats require special viewing software that most users do not have. These formats all use vectors, as opposed to bitmaps, to encode information about images. The viewing software is used to rasterize the vector graphics into bitmap images that can be displayed on the screen. Choose these formats when you want to create a long-playing, high-color, complex animation or interactive environment.

You may have heard of VRML or Web3D, but you probably have never actually seen graphics in these formats. These technologies help create sophisticated, 3-D Web pages that look more like a 3-D space than the usual, magazine-like 2-D page. Unfortunately, the graphics files required to view these pages are so large that even users with fast connections have to wait several minutes before the page and all necessary files load.

You can use these technologies for tasks, such as demonstrating technical information, that you already perform with conventional Web graphics. For example, you could create a 3-D environment where the user flies through a model of a skeleton or car. Sites such as educational pages for a medical school course, or a demonstration at an automobile manufacturer's site might also need to display objects this way.

You can sometimes create these sorts of demos with simpler formats such as QuickTime Virtual Reality (QTVR). QTVR files are panoramic bitmap images that have their ends connected, allowing you to scroll seamlessly across the image. See Apple's Web site (www.apple.com) for more information on QTVR.

Although these advanced formats have many limitations, you may want to investigate them for specialty projects. For example, if you need to show all sides of a product, and want the user to be able to rotate the product on the screen, you may want to use a QTVR file.

Using Metaphors

In some ways, designing splash screens is like designing site logos, which are discussed in the Creating and Using Icons chapter. For both types of graphics you need to convey the attitude and style of the Web site. With logos, however, you are restricted to a small space, and cannot add many elements other than the site name, address, and a small graphical representation of the site. Splash screens give you much more room, the entire browser window if you want, and you can work with many more elements.

Splash screens will not always have links; you can use graphics that decorate the page but do not link to other pages. Most splash screens will be navigation tools as well, however, and need to represent not just the site as a whole, but also a collection of discrete pages or sections.

To get started creating a splash screen that doubles as a map to the site, sketch a schematic diagram of the site, such as the one in Figure 11-4, that shows the relationship between different areas of the site.



Figure 11-4 A simple schematic diagram of a Web site

After you sketch the site, find appropriate metaphors for the different areas. The most obvious use for an image map is when you actually need people to select a geographic region. Clicking an image that looks like a roadmap can be much more intuitive than selecting individual regions from a list of links or a selection menu.

The site content itself should suggest a metaphor. If the site is related to food, for example, you can use an image of a dinner table setting, a kitchen, or a restaurant. In a restaurant image, users click the kitchen to find recipes and food preparation tips, while they click the dining room to find information about creating table designs. If the site has more technical content, you can use a metaphor such as a circuit board or a car engine.

Although a metaphor related to the site content is effective because it reflects its subject and unifies the site, you can use a common metaphor that is not related to the subject matter. For example, a simplified city map and a house plan are common site metaphors.

Sometimes you want to evoke a feeling that transcends the actual content of your site. You might want to use an image of the solar system, for example, where the home page is represented by the sun and the other pages are represented by individual planets and

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moons. You also might want to just use textures, colors, and fonts that are reminiscent of specific movies or other cultural artifacts, and are appropriate for the site.

Once you have found an appropriate metaphor, sketch your diagram again, using simple pictures instead of words. Include text to reinforce the meanings of the pictures, but make sure the pictures are meaningful on their own. Then simplify the diagram and pictures, removing the inessential elements to create an abstract representation. You might want to make your splash screen photorealistic, but normally you should abstract the idea to make navigation easier to understand. An abstracted version of the solar system metaphor is shown in Figure 11–5.



Figure 11-5 An abstraction of a solar system metaphor

Once you have a completed sketch, start creating the image in Photoshop or ImageReady.

Making the Functionality Clear

Not only do you have to make image maps functional by setting them to link to different pages, you also must make their purpose clear. You can add labels to the hot spots of image maps or to the individual slices of sliced images. While splash screens are an opportunity to be creative, the design should not overwhelm their purpose and usability. Also, splash screens are not always a substitute for text links. Make sure the users can navigate the site even if the splash screen cannot be displayed.

Using ALT Attributes

Whether you use image maps or sliced images in tables, you can add labels for the links that appear when the user rolls over them. These labels are created using the ALT attribute of the IMG tag for sliced images and the ALT attribute of the AREA tags used in image maps. Often the destinations of the links are not entirely clear. Use labels to describe the purpose of the links, reinforcing the information in the image itself. Also, users who cannot or choose not to display graphics in their browsers will not be able to navigate your site without the ALT text to help them know where the links lead. Figure 11–6 shows images with and without ALT text, as they appear in browsers, both those that can display images and those that cannot.

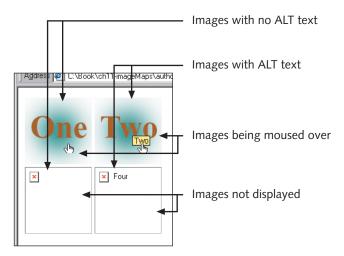


Figure 11-6 Browsers displaying text from the ALT attribute

Limiting Abstraction

Metaphors and abstraction make links more interesting than using text alone. For example, if you want to link to a section on your site containing news, you might use the image metaphor of a newsboy holding a newspaper. You could then abstract that image into just a stylized hand holding a newspaper with the word "Extra!" on the front. However, if the image maps are too abstract or the metaphors are not obvious, the images are unclear. Figure 11–7 shows a splash screen that uses too much abstraction. Although it is supposed to represent a map, that is not obvious. The metaphorical icons also are too abstract to have meaning. The graduation caps are meant to represent the locations of universities, but that also is unclear.



Figure 11-7 A splash screen designed with too much abstraction

Although you can be creative when designing splash screens, the links should be obvious. The users should not have to guess which areas are clickable. Game and novelty sites can encourage users to discover parts of the site on their own, and make them hunt for the part of the image that actually leads somewhere, but professional Web sites should have clear and easy navigation.

When designing splash screens, make sure that every link is well-defined graphically. You might want to have others test the interface to make sure it is clear, such as the one in Figure 11-8. This image is based on the same idea as Figure 11-7, but is more obviously a map, and uses text because graphical metaphors inadequately represent different geographic areas.



Figure 11-8 A well-designed splash screen

Controlling Navigation

If a splash screen is well-designed, the links will take the user anywhere he or she needs to go within the site. However, you probably will not want to use an image map or a set of sliced images on every page, as it would take up too much space. You also will need to construct a navigation bar for the other pages in the site. The navigation bar must contain the same links as the splash screen, but in a condensed shape. Figure 11-9 shows two navigation bars that reflect the colors used in the splash screen shown in Figure 11-8.

When designing the navigation bar, you should repeat the colors, lines, and textures used in the splash screen. When they match, they appear to be part of a larger design, rather than separate designs forced together. A simple navigation bar can contain only single words or phrases, while a splash screen can contain graphical representations of the links. If the designs of the navigation bar and the splash screen match, the user will be reminded of the graphical representations when using the simple text links. This helps to make the functions of the text links clear as well.

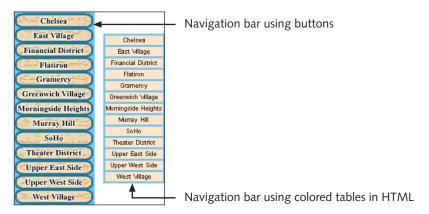


Figure 11-9 A splash screen and a navigation bar that share a similar design

You should also include the navigation bar on the same page as the splash screen. Some users have the graphics display disabled in their browsers to speed the loading and rendering of pages. Some other users have text-only browsers. None of these users can navigate sites that have only graphical navigation.

When you create a splash screen with links, you plan which parts of the image users will click to perform tasks, such as going to other parts of the site. To make splash screens easy to use and navigate, you must be able to easily specify the clickable regions. Photoshop and ImageReady include a feature called guides that helps make this possible.

Using Guides in Photoshop and ImageReady

Guides are thin vertical or horizontal lines that display over the image in the Image window. An example of an image with guides is shown in Figure 11-10. You use guides as an aid when laying out elements or slicing images to use later in tables. Like selection areas, guides are not saved or printed with the rest of the image when the image is saved in a Web format such as GIF or JPEG. However, they are saved in the PSD format, which is largely for saving temporary versions of files. Unlike selection areas, guides cannot be used as masks and do not constrain paint or filter effects to certain regions.

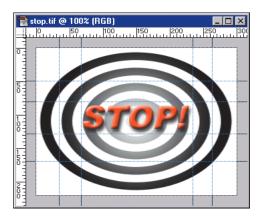


Figure 11-10 An image with guides showing

Creating Guides

The easiest way to create guides is to drag the pointer from the ruler in the Image window toward the image.

To create guides in Photoshop:

- 1. Open **blue_sky.tif** from the Data Disk.
- 2. If rulers are not visible, make them visible by selecting **Show Rulers** from the View menu.
- 3. Using any tool, drag the pointer from the left ruler into the image to create a vertical guide.
- 4. Drag the pointer down from the upper ruler to create a horizontal guide.

To see exactly where you are placing the guide, show the Info palette and watch the X and Y values in the lower-left of the Info palette. By holding down the Shift key as you drag from the ruler, you can force the guide to snap to the ticks on the ruler.

In Photoshop, you also can create guides by selecting New Guide from the View menu. In the New Guide dialog box, enter whether the guide will be horizontal or vertical, and enter the number of pixels away from the top or left side of the image to place the guide.

In ImageReady, you can create entire sets of guides at once. This is convenient for creating image maps and sliced images because you will probably want to use several guides.

Create a set of guides in ImageReady:

- 1. Create a 200 \times 200-pixel image.
- 2. Select **Create Guides** from the View Menu. The Create Guides dialog box opens, as shown in Figure 11-11.

- 3. Select **Horizontal Guides** to create guides running across the page. Select the top radio button and enter the number **3**. This creates three guides that divide the image into four even rows.
- 4. Select **Vertical Guides** to create guides running from top to bottom. Select the middle radio button and enter the number **18**. This creates 11 evenly spaced guides. The guides count from the upper-left corner, so any remaining gaps will appear on the right or bottom edges if the spacing of the guides does not divide evenly into the dimensions of the image. This results in a leftover space on the right side of the image.

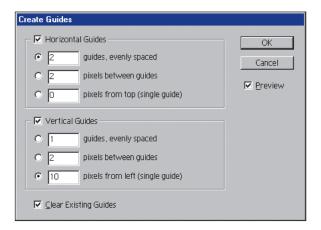


Figure 11-11 The Create Guides dialog box in ImageReady

If you want to create only one guide, select the bottom option button and enter the number of pixels from the top or left side of the image that you want the guide positioned. You also can select whether to clear the existing guides.

Viewing Guides

In ImageReady, guides always appear as light blue lines. In Photoshop, you can adjust the color and set the guides to display as solid or dotted lines. Change these aspects of your guides if they conflict with colors or textures in your original image. If the original image has areas of blue sky, for example, you might not be able to see blue guide lines over it.

To adjust the color and style of guides in Photoshop:

- 1. With blue_sky.tif open, create a vertical guide by dragging the pointer of any tool from the left ruler to the center of the image. Because the blue of the sky is similar to the blue color of the guide, the guide is difficult to see.
- 2. Click **Edit** on the menu bar in Photoshop, point to **Preferences**, then click **Guides & Grid** to open the Preferences dialog box.
- 3. Set the color to **Light Red**, the Style to **Dashed Lines**, and then click **OK**.

In both ImageReady and Photoshop, you can show or hide guides. When you hide guides, you remove them from view, allowing you to see the image unobstructed. Features such as guides and selection areas are called Extras and can be hidden all at once by deselecting the Show Extras item from the View menu.

To hide guides from an image:

- 1. With blue_sky.tif still open, and guides visible, click View on the menu bar, and then click **Show Extras** to deselect it. The guides should be invisible.
- 2. Click **View** on the menu bar again. Point to **Show**, and then click **Guides** to select it. The guides should be visible again.

The Show submenu includes other items such as Selection areas, Guides, and Slices. Next to each one is a space for a check mark. You can toggle the visibility of these items by selecting them from this submenu. You can also show or hide all items by selecting All or None.

Working with Guides

You can move, reorient, delete, or lock guides once they are created.

To work with guides:

- 1. With blue_sky.tif still open in Photoshop, create a horizontal and a vertical guide.
- 2. Move the vertical guide. Select the **Move** tool, position the pointer over the guide, and then drag the guide to its new location.
- 3. Reorient the horizontal guide. Hold down the **Option** key (for Windows, hold down the **Alt** key) and click the guide. This rotates the guide, turning it from vertical to horizontal or vice versa.
- 4. Remove one of the guides from the image by using the Move tool to drag the guide off the image.
- 5. Delete all guides by selecting **Clear Guides** from the View menu.
- 6. Create a new guide.
- 7. Lock the guide by selecting **Lock Guides** from the View menu. Once you are satisfied with the positions of your guides, you should lock them so you do not accidentally move them while editing other parts of the image.

Using Snap

The Snap feature allows you to precisely position selection areas, crops, slices and other extras without having to rely on your coordination with the mouse. When Snap is enabled, new selections and slices position themselves to your guides when you drag them within eight pixels of the guide. To enable Snap, click View on the menu bar, point to Snap To, and then click Guides.

You will use guides as you plan the layout of your splash screens. With Snap enabled for guides, setting image map regions and slices for sliced tables is easier.

CREATING IMAGE MAPS WITH IMAGEREADY

ImageReady provides several features you can use to create image maps. You can define the hot spots in an image map using the Image Map tools available in the toolbox. You also can define hot spots using layers.

Using the Image Map Tools

The Image Map tools are available in the toolbox, as shown in Figure 11-12. You also can open the Image Map tools in a separate palette by selecting the bottom row of the Tool menu. The first three Image Map tools create each of the three types of hot spots: rectangular, circular, or polygonal. Drag the tool over the area you want to define as clickable, or for polygonal areas, click once for each point that defines the area. The fourth tool is the Image Map Select tool. This lets you select and resize image map regions you have already defined.

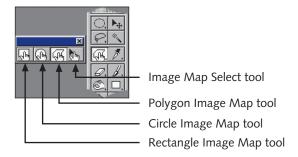


Figure 11-12 The Image Map tools in the ImageReady toolbox

You can constrain the Rectangle Image Map tool to create only perfect squares by holding down the Shift key as you drag. The Circle Image Map tool can be used only to create perfectly circular image map areas. You cannot create elliptical image map areas.

Create hot spots in ImageReady:

- 1. Open **us_map.tif** from the Data Disk.
- 2. Open the Image Map tools in a separate palette by clicking the **Image Map** tool area in the toolbox and selecting the bottom row.
- 3. Select the **Rectangle Image Map** tool from the Image Map tool palette and drag it over Colorado on the map to create a rectangular image map area.
- 4. Hold down the **Shift** key while dragging the pointer over North Dakota to create a square.

5. Select the **Circle Image Map** tool and drag it over Florida to create a circular image map area.

You can constrain the Rectangle Image Map tool and the Circle Image Map tool to a fixed size by selecting the Fixed Size check box in the Options bar. When this option is checked, you can enter the specific height and width you want for the rectangle, or the specific radius for the circle.

To use the Polygon Image Map tool, click anywhere in the image to create the first point. Click again to create more points; the polygon follows the path defined by the straight lines between the points you set. Hold down the Shift key to constrain the line to 45 degree increments. To finish the polygon, double-click the mouse at the last point. The line will then join the first and last point, closing the loop. You also can finish by holding the pointer near the first point you defined and clicking the mouse.

Create polygonal hot spots in ImageReady:

1. With us_map.tif still open, select the **Polygon Image Map** tool and create a polygonal image map area around California by clicking repeatedly around the perimeter. When you are finished, to complete the area click the first point you made.

To constrain all three shapes to any guides you have created, check the Snap option on the View menu.

You use the Image Map Select tool to adjust existing image map areas. First select an area with the tool; selected areas change to a new color. You can drag entire areas, or manipulate the anchor tabs on the sides and corners of the selected area. You can resize circle areas, and resize and reshape rectangle and polygonal areas.

Resize hot spots:

- 1. With us_map.tif still open, select the **Image Map Select** tool.
- 2. Select the image map area surrounding Colorado. The anchor tabs should become visible.
- 3. Drag the corner and side tabs to make the area fit more precisely around the state outline.

Setting Image Map Preferences

By default, the image map areas you define cloud the image below the area, making it easier to see where the hot spot is positioned. This clouding only helps you edit the image and does not affect the image itself.

To set image map preferences:

1. Click **Edit** on the menu bar, point to **Preferences**, and then click **Image Maps** to open the Image Maps dialog box, shown in Figure 11-13.

- 2. Select **Show Lines Only** to disable the clouding feature.
- 3. To adjust the clouding, enter **40%** in the Image Map Overlay text box. (0% is completely transparent and 100% is completely opaque.)
- 4. Set the color of the lines used to display the boundaries of image map areas to **Brick Red**.

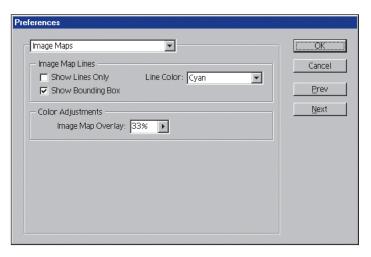


Figure 11-13 The Image Maps Preferences dialog box in ImageReady

You might want to hide the image map area outlines when editing the image. To do so, click the Image Map Visibility button in the toolbox, as shown in Figure 11-14. You also can hide the outlines by selecting Show Extras from the View menu, or by selecting Image Maps from the Show submenu under the View menu.



Figure 11-14 The Image Map Visibility button

Using the Image Map Palette

You can view and set options for an image map's areas by using the Image Map palette, shown in Figure 11-15. When a rectangular or circular area is selected, the Image Map palette displays the X and Y coordinates of the upper-left corner of the area relative to

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the upper-left corner of the image. You can adjust these coordinates by clicking the arrows to the left of the numbers or by typing in new coordinates. In a similar way, you can edit the height and width of a rectangular area or the radius of a circular area.

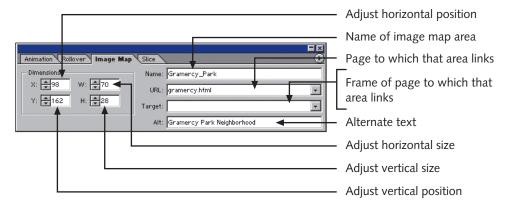


Figure 11-15 The Image Map palette in ImageReady

To adjust the dimensions of image map areas:

- 1. With us_map.tif still open, use the Image Map Select tool to select one of the rectangular image map areas.
- 2. Click **Window** on the menu bar, and then click **Show Image Map** to show the Image Map palette.
- 3. Click the **up arrow** next to the X value to translate the area to the right.
- 4. Click the **down arrow** next to the Y value to translate the area up.
- 5. Click the **up arrow** next to the W value to extend the right side of the area.
- 6. Select the circular area around Florida.
- 7. Click the **down arrow** next to the R value in the Image Map palette to decrease the radius of the area.

On the right side of the Image Map palette are text fields where you can enter values for an area. Each area is given a name, which is not used unless you create a rollover effect. Rollover effects and animations in image maps are not efficient because the entire image must swap or be animated, not just the selected area. In the Image Map palette, you also can set the destination URL for an area and the alternate text that will appear as a label over the area when the user's mouse is positioned there.

To set attributes for the image map area:

- 1. Select the image map area around California in us_map.tif.
- 2. In the Name text box of the Image Map palette, type **California**.

- 3. In the URL text box, type **cali.html**.
- 4. In the Alt text box, type **California. Capital: Sacramento**. This is the text that appears when a user rolls over the link.

When an image map area is selected, you can use features in the Image Map tool options or the Image Map palette menu to send the area forward or backward, or to the top or bottom of the stack of areas. The only time you will need to use this feature is when you have overlapping areas and need to define which area will take precedence. Areas in the front take precedence. You also can delete or duplicate areas by selecting those options from the Image Map palette menu.

You can select more than one area at a time by holding down the Shift key as you select areas with the Image Map Select tool. When multiple areas are selected, additional features become available in the Image Map tool options and the Image Map palette menu regarding alignment. If you wish, you can align the centers or edges of image map areas. When at least three areas are selected, you have more options for distributing the selected areas. You can evenly space the centers or edges of image map areas. You will seldom want to use the align or distribute features because normally you base the hot spots on the content of the image, instead of defining the hot spots in patterns.

Creating Image Maps from Layers

Depending on how you have constructed your splash screen, you might find it easier to define hot spots based on the layers in an image, rather than with the Image Map tools.

To create an image map area from a layer, first choose a layer that has areas of transparency. If you want the area to be based on multiple layers, you must first merge the layers. Then select New Layer Based Image Map Area from the Layer menu. This creates a **layer-based** image map area.

To create a layer-based image map area:

- 1. With us_map.tif still open, use the Canvas Size dialog box to pad an extra **100** pixels to the left side of the image.
- 2. Open alaska.gif from the Data Disk.
- 3. Click **Select** on the menu bar, and then click **All** to select the contents of the Alaska image.
- 4. Copy the selection and paste it into us_map.tif. Use the Move tool to position the Alaska image in the lower-left corner.
- 5. Make sure the new layer containing the Alaska image is selected in the Layers palette. Click **Layer** on the menu bar, and then click **New Layer Based Image Map Area**. Five new rectangular image map areas are created around the main part of the image and the clusters of islands.

- 6. In the Image Map palette, change the Shape to **Circle**. The image map areas turn into circles.
- 7. Change the shape to **Polygon**. The areas turn into polygonal areas.
- 8. Zoom in to the areas to see the multiple points.
- 9. Set the Quality option to **0**. This sets how many points are used to define the polygon that encloses the layer. Note how the outline is very crude and does not follow the outline of the layer very well.
- 10. Set the Quality to **100**. Note how the area selection more closely follows the outline of the layer. You also can see the difference in Quality settings in Figure 11-16.
- 11. Preview the image in a browser. Note all the coordinates required to define the polygonal coordinates of this area. Over 2,400 bytes are added to the HTML file.
- 12. In ImageReady, set the Quality to 60.
- 13. If you edit the layer, the image map area changes accordingly to follow the new outline of the layer contents. Move the layer up with the Move tool. The image map area follows.
- 14. You cannot edit the individual coordinates of the area as long as it is layer-based. Click the **palette** menu in the Image Map palette, and then click **Promote Layer Based Image Map Area**. This converts the layer-based area to a tool-based area. Once a layer-based area is converted to a tool-based area it cannot be converted back.
- 15. Use the Image Map Select tool to edit the tabs on the polygonal image map area. Make the outline fit the shape of the state.
- 16. When a layer contains content separated by transparency, multiple image map areas are created. Sometimes, many small, insignificant areas are generated by this process, and are too little to be clicked by users. Select the small areas surrounding the islands and delete them.

For most layers you will want to use a polygon shape because it follows the outline of the layer more closely than do the other two shapes. The default setting for the Quality option is 80. This is a percentage of accuracy, not the number of points created for the polygon. You should use as low a value as you can to conserve the file size of the resulting HTML.

Sometimes you will want to define hot spots based on selection areas. Using the Magic Wand tool gives you more control over defining specific areas based on pixel color. To create image map regions from selection areas, copy the selection and paste it as a new layer. Then create the layer-based image map area as described in the preceding steps.

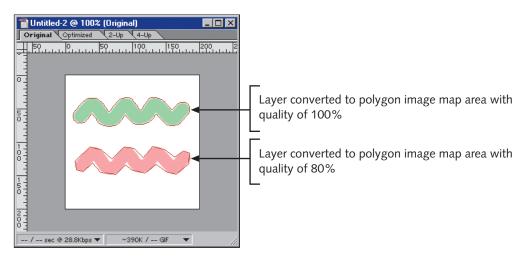


Figure 11-16 Layers converted to image map areas using different quality settings

Saving Image Maps

You save image maps as you would any other image in ImageReady. Optimize the image using the Optimize palette and select Save Optimized As from the File menu. This saves the image map image file as well as the HTML file that displays it. To incorporate the image map into a Web page, copy the necessary HTML from this file.

To save the image map:

- 1. Choose an appropriate setting in the Optimize palette.
- 2. Click File on the menu bar and then click Save Optimized As. Click the Save as type list arrow and then click HTML and Images. Save the image as us_map.gif in a new folder named chapter11. This automatically also saves an HTML file named us_map.html in the same folder.
- 3. Open **us_map.html** in a text editor to see the code. If you want to use the image map in a Web page, copy all the text between the comment tags and paste it into your page.

You have some control over the HTML that is produced. Click File on the menu bar, point to Output Settings, and select HTML. At the bottom of the Output Settings dialog box, shown in Figure 11-17, are two options for the HTML produced for image maps. Next to Type, make sure that Client-Side is selected. The other options are for creating server-side image map code and require a special script on the Web server. Next to Placement, select Top, Body, or Bottom to determine where the MAP tag will be placed in the created HTML file.

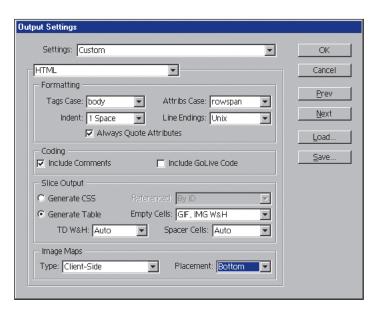


Figure 11-17 The Output Settings dialog box

CREATING IMAGE MAPS MANUALLY

Although you can easily create image maps with WYSIWYG HTML editors and tools such as ImageReady, often it is just as easy to code the HTML manually. Also, you may find yourself in a situation where you do not have access to software that can be used to create image maps, or where the software does not fully support all features of image maps. For example, some WYSIWYG HTML editors do not define polygonal hot spots. If you use one of these editors and you require clickable areas other than rectangular or circular, you must either find other software or code the HTML yourself.

In the early days of the Web, image maps were coded with server-side scripts. When the user clicked the image, a script on the Web server processed the coordinates of the place on the image the user clicked, the script looked up the appropriate destination in a list, and delivered that page to the user's browser. The drawback to this method is that server-side scripting requires additional work for both graphic designers and systems administrators. It is far easier to use the client-side image maps used today. Most browsers released after 1996 support client-side image maps.

The first step in creating a client-side image map is to define the image as an image map.

Defining an Image as an Image Map

You can use any image as an image map without editing the image file. The map itself is defined in the MAP HTML tag. This tag requires one attribute, NAME. It also requires

a closing tag. Between the opening and closing tags are additional AREA tags. Each AREA tag defines one hot spot. An example MAP tag follows. It has the name *Manhattan* and contains one rectangular hot spot that links to a file named soho.html.

```
<map name="Manhattan">
<area href="soho.html" alt="SoHo" shape="rect"
coords="95,255,130,275">
</map>
```

To define an image as an image map, add the USEMAP attribute in the IMG tag. The value of the USEMAP attribute must be set to the name of the relevant MAP tag. The MAP tag does not have to be on the same page. You could have several image maps on different pages all referring to a single MAP tag. It is unlikely, but possible, that you will use more than one image map on a page. To guarantee that there is no confusion about which image uses which MAP tag, the names must be kept consistent. Here is the example again with an IMG tag accessing the map:

```
<map name="Manhattan">
<area href="soho.html" alt="SoHo" shape="rect"
coords="95,255,130,275">
</map>
<img src="manhattan.jpg" usemap="#Manhattan">
```

The USEMAP attribute must be set to the name of the map with a pound sign to the left of it. Notice that the IMG tag does not use an ALT attribute. This is unnecessary because the alternate text is defined in the ALT attribute of the AREA tag. The image tag also does not need to be wrapped in an anchor tag, because the AREA tag also contains the necessary HREF attribute to define the destination of the link.

Defining Hot Spots in an Image Map

The AREA tag requires two additional attributes, SHAPE and COORDS. The SHAPE attribute determines the shape of the hot spot and can be set to one of three possible values:

- RECT defines the hot spot as a rectangle.
- CIRCLE defines the hot spot as a circle. The circle must be symmetrical and cannot be an ellipse.
- POLY defines the hot spot as a polygon with any number of straight sides. The polygon does not have to be symmetrical and can wrap around regions in an image or even double back on itself.

The COORDS attribute determines the dimensions and position of the hot spot and requires numerical values, separated by commas. The values are X and Y coordinates of pixels in the image. Counting always starts at 0,0 in the upper-left corner of the image, and the numbers increase in value moving down and across. The COORDS attribute must be set for rectangular, circular, and polygonal hot spots as follows:

- For rectangular hot spots, the COORDS attribute requires four values. The first two numbers are the X and Y coordinates of the upper-left corner of the hot spot. The last two numbers are the X and Y coordinates of the lower-right corner of the hot spot. This is different from creating image maps with ImageReady, where you specify the height and width of the area, rather than the coordinates of the lower-right corner.
- For circular hot spots, the COORDS attribute requires three values. The first two numbers are the X and Y coordinates of the center of the hot spot. The last number is the radius, in pixels, of the hot spot.
- For polygonal hot spots, the COORDS attribute can take any number of pairs of values. Each pair represents the X and Y coordinates of a corner of the hot spot. The final shape is defined by the lines that connect each successive pair of coordinates. The point defined by the last pair of values connects back to the first pair. Because it is easy to get confused when typing or editing long strings of numbers, remember that there should always be an even number of values of the COORDS attribute for polygonal hot spots.

The following is an example using all three shapes of hot spots, as shown in Figure 11-18:

```
<map name="Manhattan">
<area href="gramercy.html" alt="Gramercy Park"
shape="rect" coords="93,165, 174,195">
<area href="financial.html" alt="Financial District"
shape="circle" coords="110,306,35">
<area href="theater.html" alt="Theater District" shape="pol
y" coords="7,106, 64,106, 64,123, 85,123, 85,165,
13,169, 7,152">
</map>
```

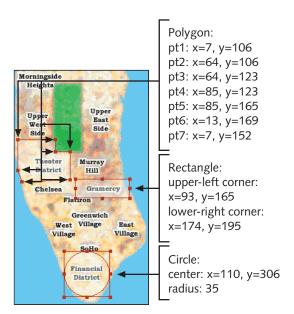



Figure 11-18 An image map with hot spots of different shapes

The hot spots are not outlined or indicated in any way on the image, other than that the ALT text appears when the pointer is over the hot spot. In the figure, the outlines are added for explanation. The spacing of the values for the COORDS attribute does not matter. You might want to add extra space to make the coordinates more readable.

Finding the Coordinates for Hot Spots

The only tricky part of creating image maps manually is finding the exact coordinates to use for the hot spots. Most image software has a feature that lets you know the exact position of any pixel in the image. In Photoshop and ImageReady, you use the Info palette. So, while you can create image maps manually, you still need to rely on graphics software to help find the coordinates. The Info palette always displays the position of the pointer relative to the rest of the image.

To find the values for a rectangular hot spot, position the pointer in the upper-left corner of the region you want to be linked. Look at the X and Y values in the Info palette and add them to your HTML code. Then do the same for the lower-right corner. You might find it easier to select the area with the Rectangular Marquee tool first.

To find the values for a circular hot spot, select the Elliptical Marquee tool and position the pointer over the center of where you want the hot spot. Note the coordinates in the Info palette and add them to your HTML. Hold down the Shift and Option keys and drag the pointer over the image to create a perfect circle selection centered around your

original coordinates. Note the Width and Height values in the Info palette. These are equal to the diameter of the circle. Because you want the radius, record half of the width.



If you're working in Windows and want to create a perfect circular selection, hold down the Alt key and then drag the pointer over the image.

To find the values for a polygonal hot spot, select the Polygonal Lasso tool and select the area you want as a hot spot. Then position the pointer over each corner and note the coordinates in the Info palette. Record the coordinates of each corner, in order, around the image. If you record the coordinates out of order, you might get hot spots that double back on themselves, as shown in Figure 11–19. These hot spots work, but might not produce the results you intend.

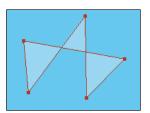


Figure 11-19 A polygonal hot spot that crosses over itself

If you define multiple hot spots that overlap each other, the browser gives precedence to the first area defined. You can use overlapping to create oddly shaped hot spots such as crescents.

CHAPTER SUMMARY

- Splash screens should establish the identity of the site, make the available content clear, and evoke a feeling about the site.
- □ Image maps are relatively easy to make, but tend to be large and have less flexibility than sliced images.
- Using Flash or other advanced technology requires more effort than creating image maps and the resultant images will not be supported by all users' browsers.
- Guides make it easy to plan where to place hot spots or make cuts for sliced images.
- Snap the edges of the image map areas to guides to keep them aligned.
- □ Hot spots in image maps can have three shapes: rectangular, circular, or polygonal.
- You can create hot spots for image maps in ImageReady with the Image Map tools, or by basing them on different layers in the Layers palette.

- A polygonal hot spot can be created to follow a complex outline exactly, but including every point may result in burdensome HTML. Use as few points as possible to minimize file size.
- □ You need to write the coordinates of the hot spots in the HTML file that displays the image map. These coordinates are available from the Info palette.
- □ ImageReady saves both the image and the HTML file necessary to display the image map. You can copy, paste, and edit the HTML in your own Web pages.

REVIEW QUESTIONS

- 1. Which of the following is true about image maps?
 - a. They can have animations in specific regions.
 - b. They can have circular hot spots.
 - c. They contain complicated tables.
 - d. They contain one image file for each area.
- 2. Which of the following is true about sliced images?
 - a. They can have animations in specific regions.
 - b. They can have polygonal hot spots.
 - c. They do not contain complicated tables.
 - d. They contain one image file.
- 3. What kind of site is not appropriate for splash screens?
 - a. E-commerce site that requires user accounts
 - b. Online magazine
 - c. Online portfolio
 - d. Promotional site
- 4. Which of the following is true about Flash and 3-D technologies?
 - a. They have universal browser support.
 - b. They are not good for specialty visualizing projects.
 - c. They do not use vectors.
 - d. They require a long development time.

- 5. Which of the following statements is false?
 - a. Client-side image maps are obsolete.
 - b. Server-side image maps are obsolete.
 - c. Server-side image maps require a script on the server.
 - d. Server-side image maps use the USEMAP attribute in the IMG tag.
- 6. Which of the following is a reason to use an image map?
 - a. You want to animate certain areas in a graphic.
 - b. You want to optimize certain areas in a graphic differently from other areas.
 - c. You want to use HTML instead of graphical elements.
 - d. You want to use polygonal hot spots.
- 7. Which of the following image formats can be used as image maps?
 - a. GIF only
 - b. GIF or JPEG only
 - c. GIF, JPEG, or PNG
 - d. JPEG only
- 8. Which of the following is not a way to use the Create Guides dialog box in ImageReady to create a horizontal guide that runs through the middle of an image that is 100 pixels high?
 - a. Make one guide, evenly spaced
 - b. Make 49 pixels between guides
 - c. Make 50 pixels between guides
 - d. Make a single guide that is 50 pixels from the top
- 9. Which of the following statements about guides in Photoshop or ImageReady is false?
 - a. Guides are saved with PSD images.
 - b. Guides can be saved with GIF and JPEG images.
 - c. Guides do not affect edits made to an image.
 - d. Guides do not print.
- 10. Which of the following is not a way to hide guides from view?
 - a. Deselect Guides from the Show submenu.
 - b. Deselect Show Extras.
 - c. Double-click the guides.
 - d. Select None from the Show submenu.

- 11. What happens when you hold down the Option key (Alt key in Windows) and click the guide?
 - a. The guide is deleted.
 - b. The guide is hidden.
 - c. The guide is selected.
 - d. The guide reorients from vertical to horizontal or vice-versa.
- 12. If you see that the Image Map palette includes options for Shape and Quality, what do you know about the currently selected image map area?
 - a. It is a tool-based area.
 - b. It is a layer-based area.
 - c. It is a polygon.
 - d. It is not a circle.
- 13. How would you create an elliptical hot spot in ImageReady?
 - a. Overlap two circular hot spots.
 - b. With the Circle Image Map tool
 - c. With the Ellipse Image Map tool
 - d. It cannot be done.
- 14. Which of the following options are available when two image map areas are selected in ImageReady?
 - a. Alignment
 - b. Changing the stacking order
 - c. Conversion to layer-based hot spots
 - d. Distribution
- 15. How do you numerically change the size of a circular image map area in the Image Map palette in ImageReady?
 - a. Edit the H value.
 - b. Edit the R value.
 - c. Edit the W value.
 - d. Edit the X value.

- 16. Why would you not use a Quality setting of 100 when converting a layer-based image map area to a polygonal tool-based one?
 - a. A polygon set to 100% is the same as a circle.
 - b. It generates too many coordinate points.
 - c. The polygon will not follow the true outline of the layer.
 - d. A setting of 100 should be used; it gives the best results.
- 17. Why do you need to include a NAME attribute in the MAP tag?
 - a. A NAME attribute is unnecessary.
 - b. So the AREA tag knows to which map it applies
 - c. So the IMG tag knows which map to use
 - d. So the MAP tag knows to what image it applies
- 18. Which of the following is not a valid value for the SHAPE attribute of the AREA tag?
 - a. "circle"
 - b. "poly"
 - c. "rect"
 - d. "square"
- 19. Which of the following statements is true?
 - a. Circular hot spots always take four coordinates.
 - b. Rectangular hot spots always take four coordinates.
 - c. Polygonal hot spots can take any number of coordinates as long as the number is odd.
 - d. Polygonal hot spots are defined by listing X/Y pairs with the radius to the next point.
- 20. Which of the following is a valid AREA tag?
 - a. <area shape="circle" coords="98,87,
 76" src="map.jpg">

 - c. <area shape="circle" href="next.html" coords="12,23,34">
 - d. <area shape="poly" href="next.html" coords="12 23,
 34 45, 56 67, 78 89">

HANDS-ON PROJECTS



Project 1: Exploring Splash Screens on the Web

Many sites use splash screens, but others do not. In your Web browser, visit at least 20 Web sites and answer the following questions:

- 1. As a percentage, how many Web sites use splash screens of one kind or another?
- 2. What sorts of sites are these? Are they online magazines, service sites, retail sites, or promotional sites?
- 3. How many of these splash screens are created using Flash? How many use image maps? How many use images in tables?
- 4. How would you characterize these splash screens? Do they contain mostly text, some text, or no text at all?



Project 2: Designing a Splash Screen

You are part of a team of people developing the front end for a new Web site that sells children's toys. Design a splash screen to use on the home page of this site.

- 1. In Photoshop, create a new image that is **320** pixels wide and **240** pixels high. There is no standard size for splash screens, but this is a common size.
- 2. The site contains six sections: Electronic Toys, Board Games, Dolls and Stuffed Animals, Educational Toys, Computer Games, and Infant and Toddler. Rather than list links to the different sections, create a single image that incorporates the six section names as well as icons for each section. For example, include an image of a teddy bear near the link to Stuffed Animals.
- 3. Use a large, simple sans serif font such as Clownface or Comic sans for the text containing the different section names.
- 4. Because the theme of the site is related to children, use bright colors for the text and background colors. Use pure black (#000000) and white (#ffffff), the paint primaries red (#ff0000), yellow (#ffff00), and blue (#0000ff), and the paint secondaries orange (#ff9900), green (#00ff00), and purple (#9900ff).
- 5. The background color of the home page is white. The edges of the image should also be white so that the screen blends with the background color.
- 6. Render the design in Photoshop, using layers to separate all the elements from each other.
- 7. Save the file as toy_screen.psd in a new folder named project_11-2.



Project 3: Designing Another Splash Screen

You need to create another splash screen, this time for an alternative music site.

The section names do not lend themselves to obvious iconography the way those of the toy site do. The metaphor for this image should evoke a feeling, rather than actually show pictures of the content.

Complete the following steps:

- 1. In Photoshop, create a new image that is 320 pixels wide and 240 pixels high.
- 2. The color scheme for this site is very dark. The background color of the home page is black. Make the image black.
- 3. Create a rough pattern to use as the background, using the Add Noise filter and at least one other filter to add texture.
- 4. Blur the image with a radius of **0.3** pixels.
- 5. Colorize the image to a Hue of 150.
- 6. Use an ornate, highly serifed font such as Gothic or Frankenstein to label the sections of the site: **News**, **Reviews**, **Downloads**, **Interviews**, **Calendar**. Use subtle monochromatic text to reinforce each section. Use dark shades of alternative colors such as dark ochre (#666633), maroon (#660033), and dark teal (#00366).
- 7. Add an **Outer Glow** effect to each text layer to make it easier to read. Keep each piece of text for each link in its own layer.
- 8. Save the image with layers intact as **music_screen.psd** in a new folder named **project_11-3**.



Project 4: Creating an Image Map in ImageReady

You have a map of Manhattan that is to be used as a navigation tool for linking to pages about businesses in different New York City neighborhoods. Use ImageReady to create an image map so that any click on the land area takes the user to a destination.

- 1. In ImageReady, open file **imap.gif** from the Data Disk.
- 2. Use the Rectangular Image Map tool to select the **green** area in the image.
- 3. Select the **Image Map Select** tool to adjust the area. Alternately, adjust the X,Y, W, and H values in the Image Map palette.
- 4. With the area selected, type **park.html** in the URL field in the Image Map palette and type **Central Park** in the Alt field.
- 5. Everywhere you see text in the image, create a polygonal hot spot around it. Adjust the points with the Image Map Select tool so that nearly every pixel of the image (other than the blue water) is covered by one of the hot spots.
- 6. For each area, add the text from the image to the URL and Alt fields in the Image Map palette, for example, **MurrayHill.html** and **Murray Hill**.

- 7. Preview the image map in your browser. Each area in the image should be a link to a different URL.
- 8. Save the HTML and image as map.html in a new folder named project_11-4.



Project 5: Creating an Image Map from Layers in ImageReady

Create an image map from one of your designs from an earlier exercise.

Complete the following steps:

- 1. In ImageReady open the file **music_screen.psd** you created for Project 3.
- 2. Select the layer that contains text for the News link.
- 3. Click **Layer** on the menu bar, point to **Layer Style**, and then click **Create Layers**. This creates a new layer from the effect. Merge this new layer with the news text layer.
- 4. Select **New Layer Based Image Map Area** from the Layer menu. You should see a new image map area selection around the contents of the layer.
- 5. Select **Polygon** for the Shape.
- 6. Set the Quality to as low a number as possible so that the basic outline is preserved without using too many points.
- 7. Select **Promote Layer Based Image Map Area** from the Image Map palette menu.
- 8. Edit the polygon points with the Image Map Select tool to more closely fit the outline of the text.
- 9. Enter appropriate entries for the URL and Alt fields in the Image Map palette.
- 10. Repeat steps 2 through 9 for each link in the image.
- 11. When you are finished, preview the image map in a browser.
- 12. Select **Save Optimized** from the File menu and save as **music_screen.html** in a new folder named **project_11-5**.



Project 6: Creating an Image Map Manually

Take one of the images from a previous exercise and code the necessary HTML to make it an image map.

- 1. In Photoshop, open the image **toy_screen.psd** that you created for Project 2, flatten the layers, optimize and save as **toy_screen.jpg** in a new folder named **project_11-6**.
- 2. Use the Rectangular Marquee tool to select a **rectangular area** around one of the section names and icons.

- 3. Show the Info palette. Position the pointer over the upper-left corner of the selection area and note the X and Y values in the Info palette.
- 4. Position the pointer over the lower-right corner of the selection area and again note the X and Y coordinates. Write down the name of the link and the two pairs of coordinates on paper or in a text document.
- 5. Open a new text document and save it as **screen.html** in the project_11-6 folder.
- 6. Add the following HTML:

```
<img src="toy_screen.jpg" width="320" height="240"
usemap="#screen" border="0">
<map name="screen">
<area href="###.html" alt="###" shape="rect" coords="###">
</map>
```

- 7. Replace the three ### characters with the appropriate link, alternate text, and coordinates. (You can make up the link, as there is not really anything to link to.) The coordinates should appear as four numbers separated by commas, first the upper-left X coordinate, then upper-left Y, then lower-right X, and lower-right Y. For example: coords="12,23,34,45".
- 8. Duplicate the AREA tag and fill in the necessary links, alternate text, and coordinates for each hot spot.
- 9. Save the screen.html file and open it in a browser. Point to the different hot spots. You should see the alternate text appear over the proper hot spots and the link display in the status bar.



Project 7: Creating Overlapping Circular Image Map Hot Spots Manually

You have an image that needs to be used for navigation. Because of its shape it cannot be created as distinct buttons or as image slices in a table.

- 1. In Photoshop, open file **arrows.tif** from the Data Disk. Save it as **arrows.jpg** in a new folder named **project_11-7**.
- 2. You need to create five circular hot spots so that the area for the green disc overlaps the blue areas. The hot spots for the blue areas will end up being crescents rather than circles.
- 3. Use the Elliptical Marquee tool to select the **green disc**. Note the coordinates of the center of the disc and note the width of the selection in the Info palette. (The coordinates do not have to be exact; estimate as well as you can.) (*Hint*: The center of the disc is in the exact center of the image). Write down the coordinates of the center and the radius of the selection.
- 4. Repeat Step 3 for each of the blue discs.
- 5. Open a new text file and save it as **screen2.html** in the project_11-7 folder.

6. Add the following HTML:

```
<img src="arrows.jpg" width="160" height="160"
usemap="#screen2" border="0">
<map name="screen2">
<area href="home.html" alt="Home" shape="circle"
coords="###">
<area href="nw.html" alt="NorthWest" shape="circle"
coords="47,47,41">
<area href="ne.html" alt="NorthEast" shape="circle"
coords="###">
<area href="sw.html" alt="SouthWest" shape="circle"
coords="###">
<area href="sw.html" alt="SouthWest" shape="circle"
coords="###">
<area href="se.html" alt="SouthEast" shape="circle"
coords="###">
</map></map>
```

- 7. Replace all the ### characters with the appropriate coordinates and radii for each area. The numbers will be the X coordinate of the center of the circle, then the Y coordinate of the center of the circle, then the radius of the circle, separated by commas. To get you started, the first blue disc already has its coordinates in place.
- 8. Save the text file and open it in a browser. Although the five hot spots overlap each other, because the area for the green disc was defined first it takes precedence over the others.



Project 8: Creating Polygonal Hot Spots Manually

You have an arrow-shaped button that will be used near other small buttons. You want to make sure that only clicks on the arrow-shaped button take the user to the destination and stray clicks are ignored.

- 1. In Photoshop, open file **right.jpg** from the Data Disk.
- 2. Position the pointer over each of the seven distinct corners of the green arrow, noting the coordinates in the Info palette.
- 3. Open a new text file and save it as **arrow.html** in a new folder named **project_11-8**. Also save **right.jpg** to this folder.
- 4. Add the following HTML:

```
<img src="right.jpg" width="160" height="120"
usemap="#arrow" border="0">
<map name="arrow">
<area href="next.html" alt="Next Page" shape="poly"
coords="###">
</map>
```

- 5. Replace the ### with each pair of coordinates, separated by commas. Make sure to list the pairs in order, clockwise or counterclockwise around the arrow. Save the image to the project folder, using the same name.
- 6. Save the file with the same name and in the same location, and open it in a browser. You should see the alternate text appear only when the mouse is over the arrow and nothing else.



Case Project

For the home page of your portfolio, create an image map to use as a splash screen. The map should contain links to all the main sections of the portfolio, and should use the same color scheme used in the navigation buttons and other images on the home page. Any text on the home page should be placed in a colored box with a different colored border that displays in both Netscape and IE. Try making the colored border one pixel thick.